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EXAMINER
HA, LEYNNA A

ART UNIT	PAPER NUMBER
2135	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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lhptoms@leehayes.com

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/692,261	CARGILLE ET AL.
	Examiner	Art Unit
	LEYNNA T. HA	2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Thanthng B. Th
AU 2135

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *11/5/03; 11/7/03; 11/21/05*.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-33 is pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   Claims 1-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1, 7, 15, 19, 21, and 29 recites a system/method of a kernel objects to implement a transaction and a security descriptor to identify a user, operations of the transactions, and a right. Although these claims recite a system, the claims are merely instructions which is directed to functional descriptive material because the claims do not recite in conjunction with a physical structure.

All other claims are also rejected by virtue of dependency.

MPEP: 2106.01 [R-5]   **> Computer-Related Nonstatutory Subject Matter<

**>Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308

(5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works,

and a compilation or mere arrangement of data.

Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se,

33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some

computer-readable medium, it becomes structurally and functionally interrelated to the medium and will

be statutory in most cases since use of technology permits the function of the descriptive material to be

realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir.

1994)(discussing patentable weight of data structure limitations in the context of a statutory claim to a

data structure stored on a computer readable medium that increases computer efficiency) and

Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure

stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31

USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

I. FUNCTIONAL DESCRIPTIVE MATERIAL: "DATA STRUCTURES "

REPRESENTING DESCRIPTIVE MATERIAL PER SE OR COMPUTER

PROGRAMS REPRESENTING COMPUTER LISTINGS PER SE

Data structures not claimed as embodied in computer-readable media are descriptive material

per se and are not statutory because they are not capable of causing functional change in the computer.

See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held

nonstatutory). Such claimed data structures do not define any structural and functional interrelationships

between the data structure and other claimed aspects of the invention which permit the data structure's

functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data

structure defines structural and functional interrelationships between the data structure and the computer

software and hardware components which permit the data structure's functionality to be realized, and is

thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of

the programs, are not physical "things." They are neither computer components nor statutory processes,

as they are not "acts" being performed. Such claimed computer programs do not define any structural and

functional interrelationships between the computer program and other claimed elements of a computer

which permit the computer program's functionality to be realized. In contrast, a claimed computer-

readable medium encoded with a computer program is a computer element which defines structural and

functional interrelationships between the computer program and the rest of the computer which permit the

computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32

USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material per se

from claims that define statutory inventions.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and
> distinctly claiming the subject matter which the applicant regards as his invention.

3.   **Claims 19-20 contains the trademark/trade name Microsoft**

Windows. Where a trademark or trade name is used in a claim as a limitation

to identify or describe a particular material or product, the claim does not

comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex*

parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain

since the trademark or trade name cannot be used properly to identify any

particular material or product. A trademark or trade name is used to identify a

source of goods, and not the goods themselves. Thus, a trademark or trade

name does not identify or describe the goods associated with the trademark or

trade name. In the present case, the trademark/trade name is used to

identify/describe **The Microsoft Windows operating system** and, accordingly,

the identification/description is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102

that form the basis for the rejections under this section made in this Office

action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or
> in public use or on sale in this country, more than one year prior to the date of application for
> patent in the United States.

4.   Claims 1-33 are rejected under 35 U.S.C. 102(b) as being anticipated

by Jensenworth, et al. (US 6,279,111).

As per claim 1:

Jensenworth disclose a kernel-level transaction system, comprising:

plural kernel objects to implement a transaction having plural operations; and

(col.2, line 66 – col.3, line 3 and col.12, lines 26-32)

a security descriptor **(col.5, lines 4-8)**, applied to at least one of the kernel

objects, to identify at least one user **(col.4, lines 53-65)**, to identify one of the

operations of the transaction that may be performed on the kernel object to which the

security descriptor is applied **(col.4, line 67 – col.5, line 2)**, and to identify a right

indicating that the identified user is permitted or prohibited to perform the operation.

(col.5, lines 10-15 and 50-52 and col.11, lines 10-22)

As per claim 2: see col.3, lines 1-3 and col.5, lines 1-4 and 30-33 and col.11, lines

25-27; discussing a system according to Claim 1, wherein the plural kernel objects

include: a transaction object to represent a transaction; a resource manager object to

represent a resource participating in the transaction; and an enlistment object to enlist

participants in the transaction.

As per claim 3: see col.5, lines 9-15; discussing a system according to Claim 1,

wherein the security descriptor comprises at least one access control entry (ACE),

which includes a security identifier (SID) and rights corresponding to the SID.

As per claim 4: see col.8, lines 47-50 and col.14, lines 2-5; discussing a system

according to Claim 2, wherein the security descriptor is applied to the transaction object,

and the operation identified by the security descriptor includes at least one of: set

information regarding the transaction object, enlist the transaction object in the

transaction, render data updates in connection with the transaction object durable, abort

the operation on the transaction object, transmit data from the transaction object to

another object, save the current point of the transaction at the transaction object, and

transmit data regarding the transaction to another device.

As per claim 5: see col.5, lines 3-20 and 45-49 and col.11, lines 25-26 and 48-49;

discussing a system according to Claim 2, wherein the security descriptor is applied to

the resource manager object, and the operation identified by the security descriptor

includes at least one of: retrieve information regarding the resource manager object, set

information regarding the resource manager object, determine the state of a transaction

at a moment of transaction failure, enlist the resource manager object in a transaction,

register the resource manager object in the transaction, receive notification upon

resolution of a transaction at the resource manager object, and set resource data in

accordance with the transaction resolution.

As per claim 6: see col.3, lines 1-3 and col.5, lines 1-4 and 30-33 and col.11,lines

25-27; discussing a system according to Claim 2, wherein the security descriptor is

applied to the enlistment object, and the operation identified by the security descriptor

includes at least one of: get information regarding the enlistment object, set information

regarding the enlistment object, determine a state of enlistments at a moment of

transaction failure obtain and reference an enlistment key, rollback the transaction and

to respond to notifications, and perform operations a superior transaction manager

would perform.

As per claim 7:

Jensenworth discloses a method of implementing a kernel-level transaction,

comprising:

attaching a security descriptor **(col.5, lines 4-8)** to at least one of plural kernel

objects **(col.2, line 66 – col.3, line 3 and col.12, lines 26-32)** utilized in a transaction;

and **(col.4, line 67 – col.5, line 2)**

performing an operation for a transaction on the at least one kernel object in

accordance with the rights accorded by the security descriptor attached to the at least

one kernel object. **(col.5, lines 10-15 and 50-52 and col.11, lines 10-22)**

As per claim 8: see col., lines ; discussing a method according to Claim 7, wherein the security descriptor includes identification for at least one user, an operation that is able to be performed on the at least one kernel object to which the security descriptor is attached, and a right indicating that the identified user is permitted or prohibited to perform the operation.

As per claim 9: see col.6, lines 29-30 and col.12, lines 26-32; discussing a method according to Claim 8, wherein the at least one kernel object is a transaction object

As per claim 10: see col.5, lines 2-3 and col.11, lines 25-27; discussing a method according to Claim 8, wherein the at least one kernel object is a resource manager object.

As per claim 11: see col.5, lines 1-4 and 30-33 and col.6,lines 28-30; discussing a method according to Claim 8, wherein the at least one kernel object is an enlistment object.

As per claim 12: see col.3, lines 1-3 and col.5, lines 1-4 and 30-33 and col.11,lines 25-27; discussing a method according to Claim 9, wherein the operation identified by the security descriptor attached to the transaction object includes at least one of: set information regarding the transaction object, enlist the transaction object in the transaction, render data updates in connection with the transaction object durable, abort the operation on the transaction object, transmit data from the transaction object to another object, save the current point of the transaction at the transaction object, and transmit data regarding the transaction to another device.

As per claim 13: see col.5, lines 3-20 and 45-49 and col.11, lines 25-26 and 48-49;

discussing a method according to Claim 10, wherein the operation identified by the security descriptor attached to the resource manager object includes at least one of: retrieve information regarding the resource manager object, set information regarding the resource manager object, determine the state of a transaction at a moment of transaction failure, object, and enlist the resource manager object in a transaction, register the resource manager object in the transaction, receive notification upon resolution of a transaction at the resource manager set resource data in accordance with the transaction resolution.

As per claim 14: see col.5, lines 3-20 and 45-49 and col.11, lines 10-22; discussing a method according to Claim 11, wherein the operation identified by the security descriptor includes at least one of: get information regarding the enlistment object, set information regarding the enlistment object, determine a state of enlistments at a moment of transaction failure, obtain and reference an enlistment key, rollback the transaction and to respond to notifications, and perform operations a superior transaction manager would perform.

As per claim 15:

Jensenworth discloses a computer-readable medium having stored thereon an object attached to a kernel object, the object comprising:

a first data entry identifying at least one user; **(col.2, lines 2-4)**

a second data entry identifying an operation capable of being performed on the kernel object by the user identified by the first data entry; and **(col.3, lines 54-55 and col.4, lines 48-57)**

a third data entry indicating a right for the user identified by the first data entry to perform the operation identified by the second data entry. **(col.5, lines 10-15 and 50-52 and col.11, lines 10-22)**

As per claim 16: see col.8, lines 47-50 and col.14, lines 2-5; discussing a computer-readable medium according to Claim 15, wherein the kernel object is a transaction object, and the identified operation includes at least one of: set information regarding the transaction object, enlist the transaction object in the transaction, render data updates in connection with the transaction object durable, abort the operation on the transaction object, transmit data from the transaction object to another object, save the current point of the transaction at the transaction object, and transmit data regarding the transaction to another device.

As per claim 17: see col.5, lines 3-20 and 45-49 and col.11, lines 10-22; discussing a computer-readable medium according to Claim 15, wherein the kernel object is a resource manager object, and the identified operation includes at least one of: retrieve information regarding the resource manager object, set information regarding the resource manager object, determine the state of a transaction at a moment of transaction failure, enlist the resource manager object in a transaction, register the resource manager object in the transaction, receive notification upon resolution of a transaction at the resource manager object, and set resource data in accordance with the transaction resolution.

As per claim 18: see col.5, lines 3-20 and 45-49 and col.11, lines 25-26; discussing a computer-readable medium according to Claim 15, wherein the kernel object is an

enlistment object, and the identified operation includes at least one of: get information

regarding the enlistment object, set information regarding the enlistment object,

determine a state of enlistments at a moment of transaction failure, obtain and

reference an enlistment key, rollback the transaction and to respond to notifications, and

perform operations a superior transaction manager would perform.

As per claim 19:

Jensenworth discloses a transaction method, comprising:

implementing a transaction among kernel objects; and **(col.2, line 66 – col.3,

line 3 and col.12, lines 26-32)**

securing the transaction utilizing The Microsoft® Windows® operating system

security model. **(col.4, lines 31-45 and col.13, lines 61-64)**

As per claim 20: see col.4, lines 31-45 and col.13, lines 61-64; discussing a

transaction method according to Claim 19, wherein The Microsoft® Windows®

operating system security model includes applying a security descriptor to at least one

of the kernel objects participating in the transaction, and wherein the security descriptor

identifies at least one user, an operation to be performed on the at least one kernel

object to which the security descriptor is applied, and a right indicating that the identified

user is permitted or prohibited to perform the operation.

As per claim 21:.

Jensenworth discloses a method of implementing a transaction, comprising:

attaching a security descriptor **(col.5, lines 4-8)** to at least one of plural objects

utilized in a transaction; and **(col.2, line 66 – col.3, line 3 and col.12, lines 26-32)**

performing an operation for a transaction on the at least one object in accordance with the rights accorded by the security descriptor attached to the at least one object. **(col.5, lines 10-15 and 50-52 and col.11, lines 10-22)**

As per claim 22: see ; discussing a method according to Claim 21, wherein the security descriptor includes identification for at least one user, an operation to be performed on the at least one object to which the security descriptor is attached, and a right indicating that the identified user is permitted or prohibited to perform the operation.

As per claim 23: see col.2, line 66 – col.3, line 3 and col.12, lines 26-32; discussing a method according to Claim 22, wherein the at least one object is a transaction object.

As per claim 24: see col.5, lines 2-3 and col.11, lines 25-27; discussing a method according to Claim 22, wherein the at least one object is a resource manager object.

As per claim 25: see col.5, lines 9-12 and col.6, lines 28-30; discussing a method according to Claim 22, wherein the at least one object is an enlistment object.

As per claim 26: see col.5, lines 10-15 and 50-52 and col.11, lines 10-22; discussing a method according to Claim 23, wherein the operation identified by the security descriptor attached to the transaction object includes at least one of: set information regarding the transaction object, enlist the transaction object in the transaction, render data updates in connection with the transaction object durable, abort the operation on the transaction object, transmit data from the transaction object to another object, save the current point of the transaction at the transaction object, and transmit data regarding the transaction to another device.

As per claim 27: see col.5, lines 3-20 and 45-49 and col.11, lines 10-22; discussing

a method according to Claim 24, wherein the operation identified by the security

descriptor attached to the resource manager object includes at least one of: retrieve

information regarding the resource manager object, set information regarding the

resource manager object, determine the state of a transaction at a moment of

transaction failure, enlist the resource manager object in a transaction, register the

resource manager object in the transaction, receive notification upon resolution of a

transaction at the resource manager object, and

set resource data in accordance with the transaction resolution.

As per claim 28: see col.5, lines 10-15 and 50-52 and col.11, lines 10-22; discussing

a method according to Claim 25, wherein the operation identified by the security

descriptor includes at least one of:

get information regarding the enlistment object, set information regarding the enlistment

object, determine a state of enlistments at a moment of transaction failure, obtain and

reference an enlistment key, rollback the transaction and to respond to notifications,

and perform operations a superior transaction manager would perform.

As per claim 29:

      Jensenworth discloses a kernel-level transaction system, comprising:

      means for implementing a transaction among kernel objects; and **(col.2, line 66**

– col.3, line 3 and col.12, lines 26-32)

      means for securing the transaction by applying a security descriptor to at least

one of the kernel objects **(col.5, lines 4-8)**, wherein the security descriptor identifies at

least one user, an operation to be performed on the kernel object to which the security

descriptor is applied, and a right indicating that the identified user is permitted or

prohibited to perform the operation. **(col.5, lines 10-15 and 50-52 and col.11, lines 10-**

22)

As per claim 30: see col.5, lines 2-3 and col.11, lines 25-27; discussing a system

according to Claim 29, wherein the kernel objects include: a transaction object to

represent a transaction; a resource manager object to represent a resource participating

in the transaction; and an enlistment object to enlist participants in the transaction.

As per claim 31: see col.5, lines 10-15 and 50-52 and col.11, lines 10-22; discussing

a system according to Claim 30, wherein the security descriptor is applied to the

transaction object, and the operation identified by the security descriptor includes at

least one of: set information regarding the transaction object, enlist the transaction

object in the transaction, render data updates in connection with the transaction object

durable, abort the operation on the transaction object, transmit data from the transaction

object to another object, save the current point of the transaction at the transaction

object, and transmit data regarding the transaction to another device.

As per claim 32: see col.5, lines 10-15 and 50-52 and col.11, lines 10-26; discussing

a system according to Claim 30, wherein the security descriptor is applied to the

resource manager object, and the operation identified by the security descriptor

includes at least one of: retrieve information regarding the resource manager object, set

information regarding the resource manager object, determine the state of a transaction

at a moment of transaction failure, enlist the resource manager object in a transaction,

register the resource manager object in the transaction, receive notification upon

resolution of a transaction at the resource manager object, and set resource data in

accordance with the transaction resolution.

As per claim 33: see col.5, lines 34-38 and col.11, lines 10-22; discussing a system

according to Claim 30, wherein the security descriptor is applied to the enlistment

object, and the operation identified by the security descriptor includes at least one of:

get information regarding the enlistment object, set information regarding the enlistment

object, and determine a state of enlistments at a moment of transaction failure.

Conclusion

Any inquiry concerning this communication or earlier communications

from the examiner should be directed to LEYNNA T. HA whose telephone

number is (571) 272-3851. The examiner can normally be reached on Monday

- Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

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